

Algebra II

Composition of Functions

Name _____

Directions: Evaluate each pair of functions.	
$f(x) = -3x, g(x) = x + 2$ $f(-1) =$ $g(-1) =$ 1) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$	$f(x) = 4x, g(x) = x - 3$ $f(-1) =$ $g(-1) =$ 2) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$
$f(x) = x^2, g(x) = x + 5$ $f(-1) =$ $g(-1) =$ 3) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$	$f(x) = x^3, g(x) = x - 2$ $f(-1) =$ $g(-1) =$ 4) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$
$f(x) = 3x^3 + 1, g(x) = 2x$ $f(-1) =$ $g(-1) =$ 5) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$	$f(x) = -x^2, g(x) = -2x$ $f(-1) =$ $g(-1) =$ 6) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$
$f(x) = 2x^2 + 4x - 1, g(x) = 3x^2$ $f(-1) =$ $g(-1) =$ 7) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$	$f(x) = 3x^2 + 2x, g(x) = -x^2 + 2x$ $f(-1) =$ $g(-1) =$ 8) $f(0) =$ $g(0) =$ $f(2) =$ $g(2) =$ $f(a) =$ $g(a) =$

Directions: Evaluate.	
$f(x) = -3x, g(x) = x + 2$ $g[f(1)] =$ 9) $g[f(-2)] =$ $g[f(0)] =$	$f(x) = 4x, g(x) = x - 3$ $g[f(1)] =$ 10) $g[f(-2)] =$ $g[f(0)] =$
$f(x) = 5x, g(x) = x + 5$ $g[f(1)] =$ 11) $g[f(-2)] =$ $g[f(0)] =$	$f(x) = -4x, g(x) = x - 2$ $g[f(1)] =$ 12) $g[f(-2)] =$ $g[f(0)] =$

$f(x) = 2x^2, g(x) = 2x$ 13) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$	$f(x) = -x^2, g(x) = -2x$ 14) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$
$f(x) = 2x^2, g(x) = 3x + 2$ 15) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$	$f(x) = 3x^2, g(x) = -x$ 16) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$
$f(x) = 2x, g(x) = -3x$ 17) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$	$f(x) = -3x, g(x) = 4x$ 18) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$
$f(x) = 2x + 1, g(x) = 4x + 2$ 19) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$	$f(x) = 3x + 5, g(x) = x - 1$ 20) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$
$f(x) = -3x + 5, g(x) = -2x + 1$ 21) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$	$f(x) = 5x - 2, g(x) = -x - 1$ 22) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$
$f(x) = x, g(x) = 2x$ 23) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$	$f(x) = 2x, g(x) = 3x$ 24) $g[f(1)] =$ $g[f(-2)] =$ $g[f(0)] =$

Directions: Evaluate.	
$f(x) = 2x^2, g(x) = 2x + 3$ $g[f(-2)] =$ $g[f(0)] =$ $g[f(1)] =$ 25) $g[f(k)] =$ $f[g(-2)] =$ $f[g(0)] =$ $f[g(1)] =$ $f[g(k)] =$	$f(x) = x^2 + 2x, g(x) = -3x + 2$ $g[f(-2)] =$ $g[f(0)] =$ $g[f(1)] =$ 26) $g[f(k)] =$ $f[g(-2)] =$ $f[g(0)] =$ $f[g(1)] =$ $f[g(k)] =$

Directions: Find $(g \circ f)(x)$ & $(f \circ g)(x)$ for each pair of functions.	
$f(x) = x^2, g(x) = 2x$ $(g \circ f)(x) =$ 27) $(f \circ g)(x) =$	$f(x) = 2x^2, g(x) = 3x$ $(g \circ f)(x) =$ 28) $(f \circ g)(x) =$
$f(x) = 3x^2, g(x) = -4x$ $(g \circ f)(x) =$ 29) $(f \circ g)(x) =$	$f(x) = -x^2, g(x) = -2x$ $(g \circ f)(x) =$ 30) $(f \circ g)(x) =$